

Search for lepton flavor violating decays $\tau^- \rightarrow \ell^- \pi^0, \ell^- \eta, \ell^- \eta'$

Belle Collaboration

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Abstract

We have searched for lepton flavor violating semileptonic τ^- decays using a data sample of 153.8 fb^{-1} accumulated with the Belle detector at the KEKB e^+e^- collider. For the six decay modes studied, the observed yield is compatible with the estimated background and the following upper limits are set at the 90% confidence level: $\mathcal{B}(\tau^- \rightarrow e^- \eta) < 2.3 \times 10^{-7}$, $\mathcal{B}(\tau^- \rightarrow$

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